

The background of the slide is a faded landscape photograph showing rolling green hills under a blue sky with white clouds. In the foreground, there is a body of water, possibly a reservoir or lake, with some dry grass or reeds visible. A thin black crosshair is overlaid on the image, with a vertical line on the left and a horizontal line across the top.

CVSP Water Quality Management

Background

Existing Conditions

National Pollution Discharge Elimination System
(NPDES) Requirements

Next Steps/Process

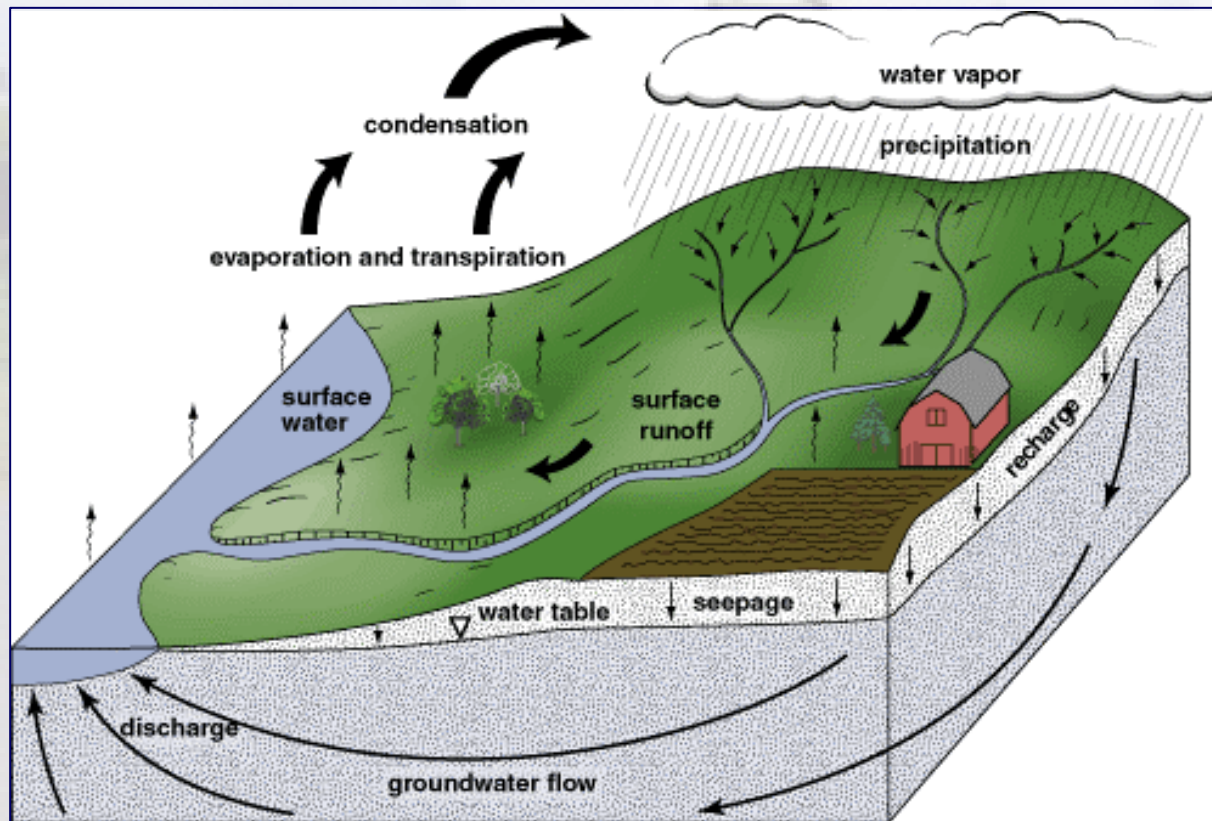
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CVSP Task Force

November, 13 2006

Background

Runoff, Water Quality and Water Supply are Interdependent



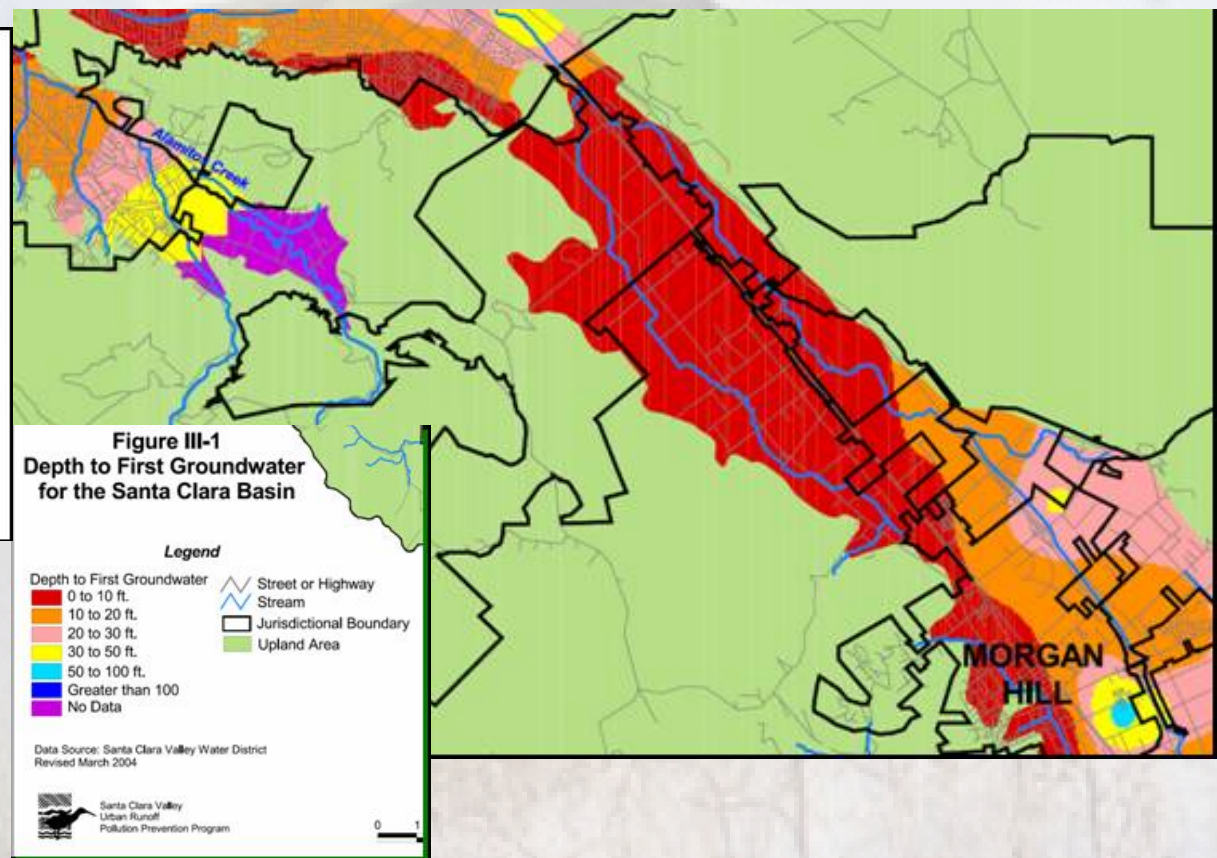
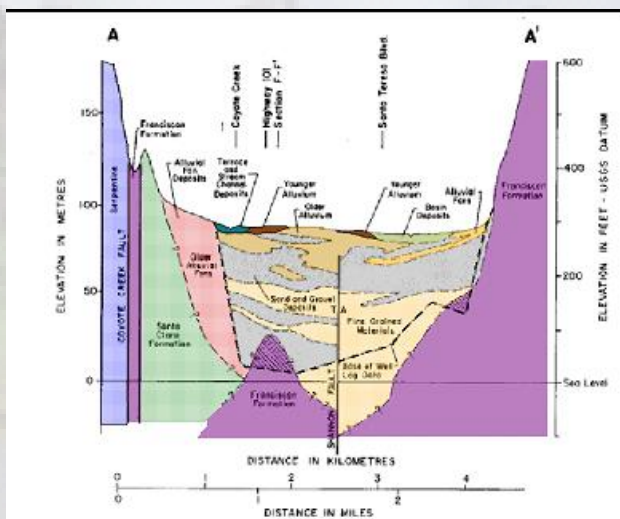


Background

- ◆ Surface Water Quality Linked to Groundwater Quality
 - National Pollutant Discharge Elimination System (NPDES) Permit Requirements through Santa Clara Valley Pollution Prevention Program (SCVURPPP)
 - C.3 and Hydromodification Management Program (HMP)
- ◆ Intent is to protect groundwater supplies and downstream watersheds.

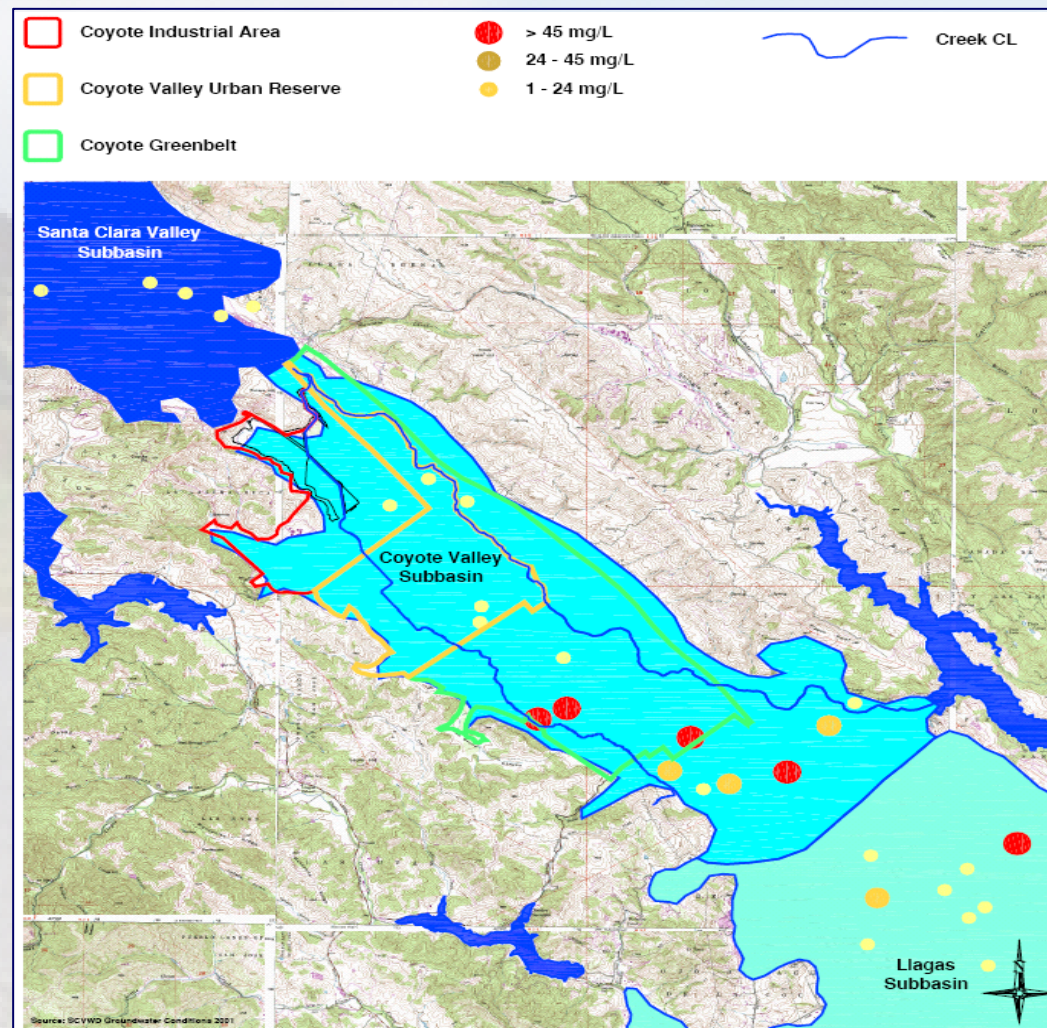
Existing Conditions

Groundwater Protection



Existing Conditions

Nitrates



Perchlorate

-
- San Martin Area Maximum Perchlorate Historic Concentrations November 10, 1999 to February 14, 2005
- Legend
- Perchlorate Results in ppb
- >100
 - 100-200
 - 20-100
 - 10-20
 - 5-10
 - 1-5
 - Not Detected
 - Not Detected - No Sample
 - Former Gas Conversion Facility
 - Recharge Facility
- Groundwater testing results through February 14, 2005

The background of the slide is a photograph of a calm lake with hills in the distance under a blue sky with some clouds. In the foreground, there are some dry, brown reeds or grasses. A thin black crosshair is positioned over the top left of the slide, with the title text to its right.

NPDES Requirements

- ◆ **City of San Jose is a NPDES Permit co-permittee**
- ◆ **Administered through SCVURPPP**
- ◆ **C.3 Provisions (Water Quality)**
- ◆ **Hydromodification Management Plan (HMP)**

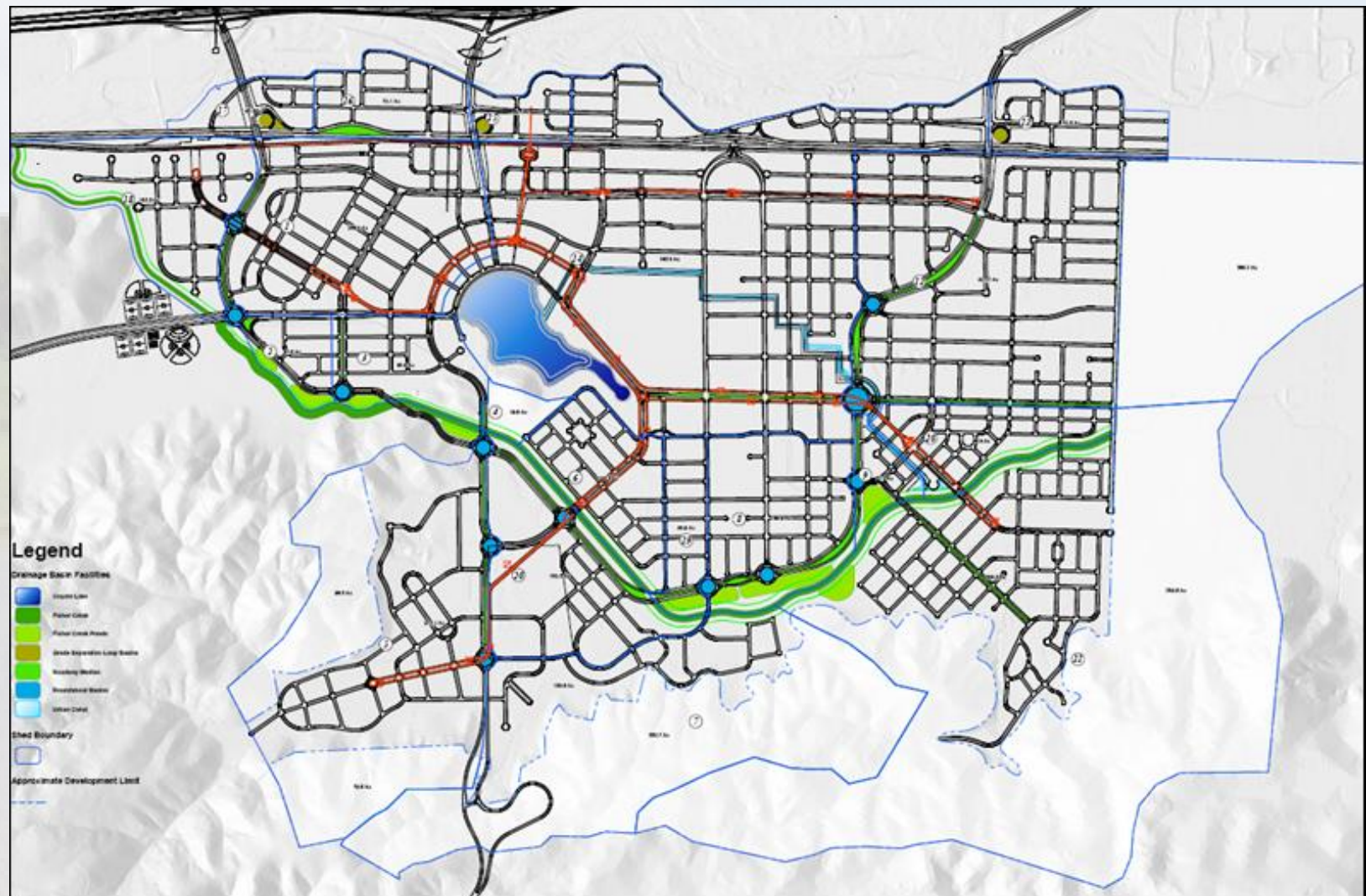


NPDES Requirements

C.3 Provisions

- ◆ **Best Management Practices**
 - Permeable Pavements
 - Vegetated Filter Strips
 - Vegetated Swales
 - Flow-through Planter Boxes
 - Media Filtration Devices
 - Green Roofs
 - New trees
 - Construction Best Management Practices (BMPs)
- ◆ **Flow Based and/or Storage Based Treatment**

NPDES Requirements (C.3)



The background of the slide is a photograph of a wide river, likely the San Jose River, flowing through a landscape with rolling hills in the distance. The sky is overcast with soft, white clouds. In the foreground, there are some dry, brownish reeds or grasses. A thin black crosshair is overlaid on the top left of the slide, with the vertical line extending down to the section header.

NPDES Requirements (C.3)

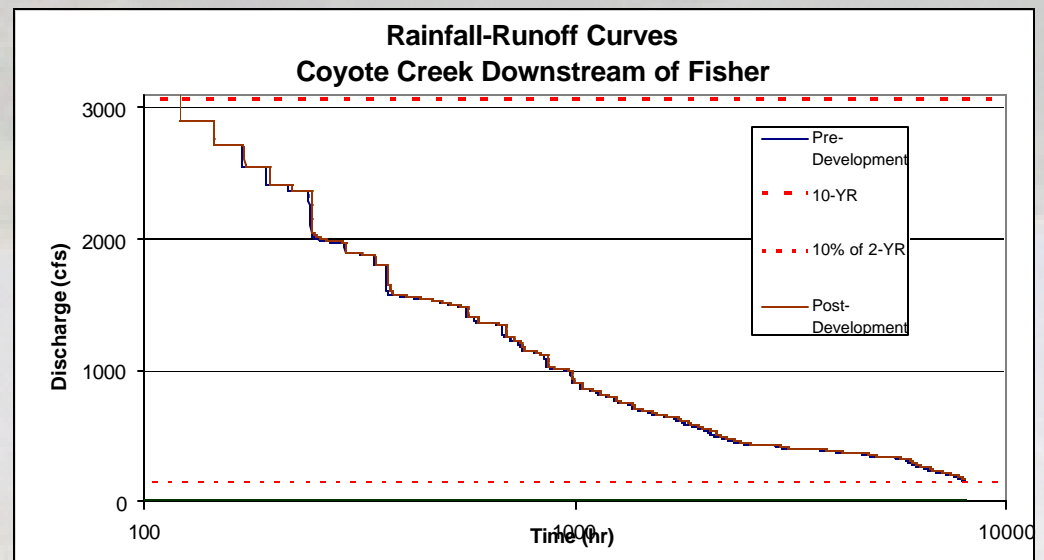
C.3(f) Hydromodification

- ◆ **Concerned with additional erosion**
- ◆ **Fisher Creek restored as stable channel**
- ◆ **Coyote Creek?**

NPDES Requirements (C.3 HMP)

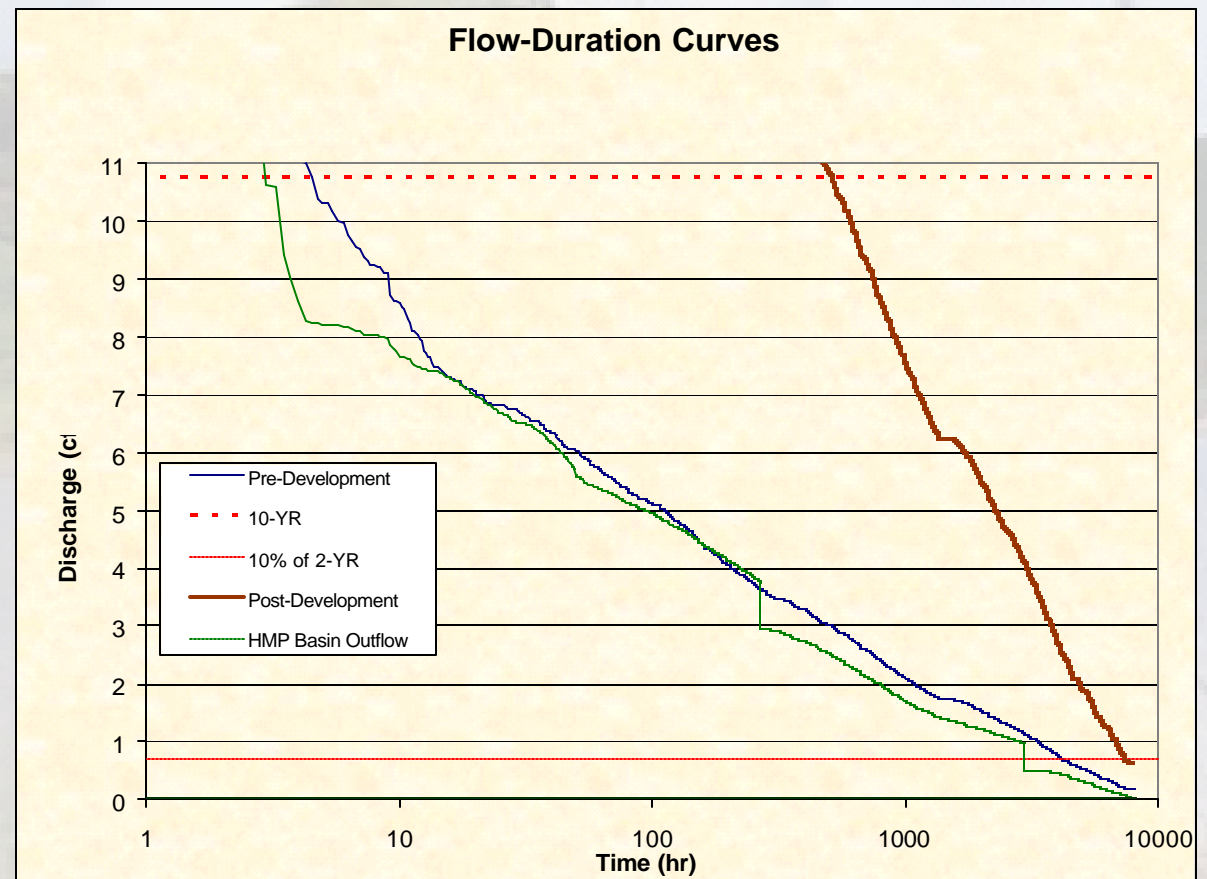
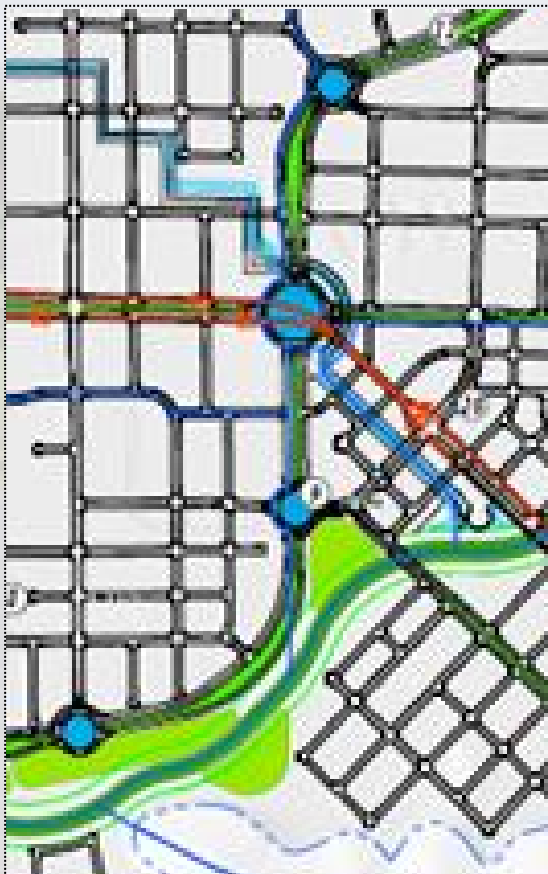
Operation of Anderson Reservoir appears to influence hydromodification on Coyote Creek more than CVSP development.

	Flow (cfs)	
	Post-CVSP Increase	Anderson Reservoir Releases
Minimum	0	0
Maximum	339	4170
Average	8	55
Standard Deviation	11	120
Coefficient of Variation	1.4	2.2



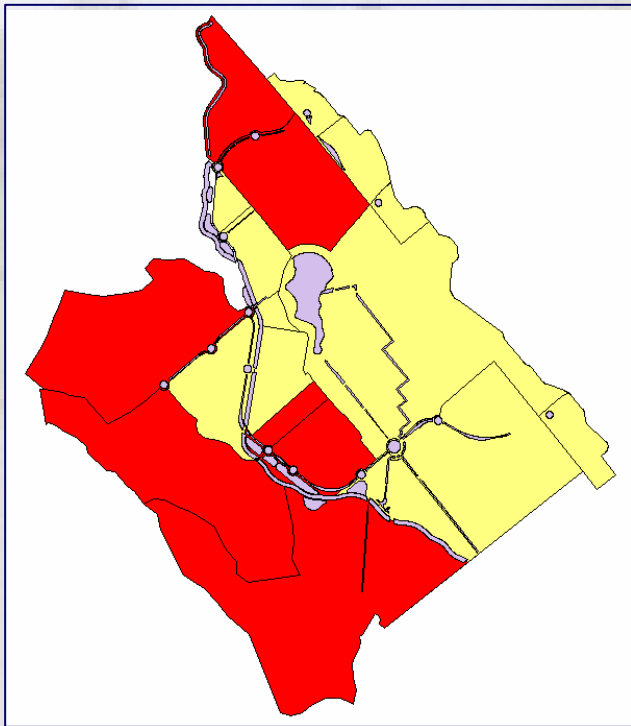
NPDES Requirements (C.3 HMP)

Typical HMP Basin per SCVURPPP Guidelines



NPDES Requirements (C.3 HMP)

Coyote Valley HMP Basin Complications



SCVURPPP prohibits percolation due to groundwater protection concerns.

Basins located in red areas cannot drain within 3 to 5 days, leading to vector control and public health problems.

NPDES Requirements (C.3 HMP)

HMP Alternatives

- ♦ **Regional Board may find that Fisher Creek and Coyote Creek are stable and do not require HMP.**
- ♦ **Projects to improve Coyote Creek stability in lieu of HMP.**
 - (e.g. erosion at Bernal Road)
- ♦ **Some level of regional in-Valley HMP allowing percolation with pre-treatment.**

The City is currently working with SCVURPPP, the Santa Clara Valley Water District and the San Francisco Regional Water Quality Control Board to determine the right solution for the CVSP circumstances.

